

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 14

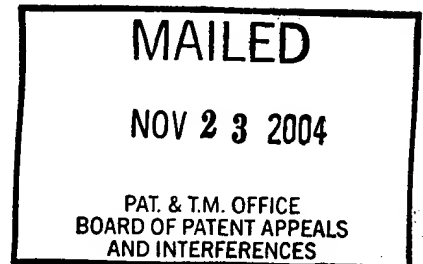
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte THOMAS A. BAUDENDISTEL, SANJIV G. TEWANI, MARK W. LONG,
JAMES E. DINGLE, LARRY M. OBERDIER, and DAVID K. LAMBERT

Appeal No. 2004-1553
Application No. 09/915,631

ON BRIEF



Before FRANKFORT, STAAB, and FLEMING, Administrative Patent Judges.

STAAB, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on an appeal from the examiner's final rejection of claims 1-20, all the claims currently pending in the application.

Appellants' invention pertains to a powertrain mount having a capacitive displacement sensor. As explained on pages 3-4 of appellants' specification, an output signal of the sensor is

Appeal No. 2004-1553
Application No. 09/915,631

utilized by a control device to adjust the damping characteristics of the mount. A further understanding of the invention can be derived from a reading of exemplary claims 1 and 19.

The sole reference applied by the examiner in the final rejection is:

Yamakado et al. (Yamakado) 5,726,886 Mar. 10, 1998

Claims 1-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Yamakado.

Reference is made to appellants' main and reply briefs (Paper Nos. 7 and 9) and to the examiner's final rejection and answer (Paper Nos. 5 and 8) for the respective positions of appellants and the examiner regarding the merits of this rejection.

Discussion

Independent claims 1 and 10 are directed to a mount for a powertrain component of a motor vehicle comprising, among other things, a first plate "connected to" one of the powertrain component or a frame of the motor vehicle, and a second plate "connected to" the other of the powertrain component or the frame of the motor vehicle.

Claim 19, the only other independent claim on appeal, is directed to a system for controlling the damping characteristics of a motor vehicle powertrain mount comprising, among other things, a first positively charged plate "fixed relative to" one of the powertrain component or the frame of the motor vehicle, and a second, negatively charged plate "fixed relative to" the other of the powertrain component or the frame of the motor vehicle.

Yamakado, the alleged anticipatory reference, is directed, in pertinent part, to mounting devices for mounting a vehicle engine to a chassis wherein the mounting devices are controlled in dependence on the differential of acceleration of the engine, thereby to smooth the transmission of power from the engine (column 2, lines 54-60). With reference to Figure 17, a sensor 163 for measuring the differential of acceleration is mounted on an engine 161, the engine being supported by engine mounts 162a and 162b. The acceleration differential sensor 163 supplies a signal to a controller 167 which in turn controls the engine mounts 162a, 162b, presumably by changing the damping characteristics of the mounts. Figure 4 shows the configuration of a first embodiment of an acceleration differential sensor that may be used in the system of Figure 17. The Figure 4 sensor

consists of a pendulum **1** attached to a casing **10a** using a joint **13** providing one degree of freedom of movement (i.e., the pendulum **1** is constrained to move in one plane only). A coil **3** is fixed to the pendulum **1**, and a movable electrode **41** is attached at or adjacent the free end (moving direction) of the pendulum **1**. A casing **10** supports a magnet **2** so that the magnet is adjacent the coil **3**, and an electrode **42** is fixed to the casing **10**, facing the movable electrode **41**.

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As mentioned above, the pendulum **1** has one degree of freedom of movement (in the plane of the paper in FIG. **4**), so the sensor detects movement, and the differential of acceleration of that movement in that direction. The movable electrode **41** and electrode **42** fixed to the casing **10** form two pairs of electrodes representing two plate capacitors. The electrostatic capacitance C of such a plate capacitor is inversely proportional to the size of the gap between the capacitor plates

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. . . [T]he displacement of the pendulum **1** can be detected from the change C in the electrostatic capacitance between the two capacitors each formed by a movable electrode **41** and a fixed electrode **42**. [Column 7, lines 12-48.]

In rejecting the appealed claims as being anticipated by Yamakado, the examiner reads the claimed first plate on the movable electrode **41** of Yamakado's sensor and the claimed second plate on the fixed electrode **42** of Yamakado's sensor. With respect to the "connected to" limitations of independent claims 1 and 10, the examiner contends (answer, page 5)

that plate 42 of the reference is in fact connected to a frame [P]late 42, while not being directly connected to the frame of the assembly (the frame being the portion located directly below the engine mounts), is indirectly connected to the frame at least through the controller component 167 and engine mounts 162a and 162b or subsequently, indirectly connected through the engine 161 and the engine mounts.

Therefore, since applicant has not claimed that the second plate 42 is directly connected to a frame, this limitation is met by Yamakado et al.

Concerning the "fixed relative to" limitations of independent claim 19, the examiner takes the position (answer, page 6)

that plate 41 of the reference is fixed, at least to some extent, to the powertrain component 161. As discussed in column 7[,] lines 11-15 of the reference, at least through joint 13, the pendulum 1, in which plate 41 is attached thereto, can only move in one direction, therefore plate 41 is fixed, at least somewhat, with respect to the powertrain equivalent component 161, i.e., fixed in the directions/planes the pendulum 1 is not allowed to move in.

Appellants argue (brief, pages 4-5) that the examiner is in error in asserting that the second plate 42 of Yamakado is "connected to" the frame of the vehicle and in asserting that the first plate 41 of Yamakado is "fixed relative to" one of the powertrain component or frame of the vehicle.

In general, words in a claim will be given their ordinary and accustomed meaning, unless it appears that the inventor used them differently, *Envirotech Corp. v. Al George, Inc.* 730 F.2d 753, 759, 221 USPQ 473, 477 (Fed. Cir. 1984), and a claim will be given its broadest reasonable interpretation, consistent with the specification. *In re Prater*, 415 F.2d 1393, 1404, 162 USPQ 541, 550 (CCPA 1969). Considering first the examiner's treatment of independent claims 1 and 10, the dictionary¹ contains several definitions of the verb "connect." Consistent with appellants' specification², and as normally applied in the structural sense, we consider that the claim terminology calling for a plate "connected to" a component or frame to connote a plate that is "joined or fastened together" with a component or frame, which is the past tense equivalent of a dictionary definition of the verb "connect." While we acknowledge that the verb "connect" may also mean "to associate or relate," we do not consider this broader definition to be the appropriate broadest reasonable

¹Webster's II New Riverside University Dictionary, copyright © 1984 by Houghton Mifflin Company.

²See page 3, lines 8-12, of the specification, where the mount assembly is described as being attached to the engine or transmission by a first fastener 14 and attached to the vehicle frame by a second fastener 15 such that the mount is interposed between the engine or transmission and the frame.

interpretation of the term "connected" as used in appealed claims 1 and 10 when the claims are read in light of appellants' specification. Based on this claim interpretation, we cannot support the examiner's strained position to the effect that plate 42 of Yamakado is indirectly connected to the vehicle frame through either the controller component 167 and the engine mounts 162a and 162b or, alternatively, through the engine 161 and the engine mounts.

We reach a similar conclusion with respect to the examiner's treatment of independent claim 19. Consistent with appellants' specification³, and as normally applied in the structural sense, we consider that the claim terminology calling for a plate "fixed relative to" a component or frame to connote a plate that is "fastened" to or "made fast to" a component or frame, both of which are past tense equivalents of dictionary definitions of the verb "fix." On the other hand, we do not find any dictionary definition of the verb "fix" which would allow the phrase "fixed relative to" to encompass the sort of relationship disclosed in Figures 4 and 17 of Yamakado between either of the electrodes 41, 42 of sensor 163 and the frame of the vehicle. Based on this

³*Ib.*

Appeal No. 2004-1553
Application No. 09/915,631

claim interpretation, we cannot support the examiner's equally strained position to the effect that plate 41 of Yamakado is fixed at least to some degree to the engine or vehicle frame due to the circumstance that it can only move in one plane.


To summarize, we do not consider either one of the electrodes 41, 42 of Yamakado's sensor to be either "connected to" or "fixed relative to" the frame of the vehicle. It follows that we cannot sustain the examiner's rejection of claims 1-20 as being anticipated by Yamakado.

Appeal No. 2004-1553
Application No. 09/915,631

The decision of the examiner is reversed.

REVERSED

Charles E. Frankfort
CHARLES E. FRANKFORT
Administrative Patent Judge


LAWRENCE J. STAAB
Administrative Patent Judge

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Michael R Fleming
MICHAEL R. FLEMING
Administrative Patent Judge

LJS:hh

Appeal No. 2004-1553
Application No. 09/915,631

DELPHI TECHNOLOGIES, INC.
LEGAL STAFF, MAIL CODE: 482-204-450
1450 W. LONG LAKE
P.O. BOX 5052
TROY, MI 48098